ABSTRACT

[0025] Two reference voltages and two differential receivers are used to detect low-to-high and high-to-low transitions on an input signal and set a received signal output. On reference voltage is set near but under the electrical high voltage level and the other is set near but above the electrical low voltage level. The reference voltage that is closest to the input signal is designated as the active reference voltage. When the input signal crosses the active reference voltage digital value of the received signal output is changed. When the input signal then crosses the inactive reference voltage, the inactive reference voltage is made the active reference voltage. A dead-time is then waited where input signal crossings of the active reference voltage are ignored. After the dead-time, input signal crossings of the active reference voltage will change the received signal output.